

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1 1. (Currently amended): A data duplicating method that connects a first
2 information processing system comprised of a first host computer and a first storage device and
3 at least one second information processing system comprised of a second host computer and a
4 second storage device through a data transfer path and ~~holds the same data is duplicated in said~~
5 ~~first and second information processing systems by copying copies~~ first update data generated in
6 said first information processing system to said second information processing system,

7 wherein said second information processing system generates difference control
8 information for identifying second update data generated in said second information processing
9 system after taking over information and data processing performed by said first information
10 processing system when said first information processing system stops operating, and after
11 resumption of operation of said first information processing system, said second update data is
12 selectively copied to said first information processing system on the basis of said difference
13 control information,

14 wherein said difference control information is a bit map that indicates the
15 presence or absence of completion of data duplication of said first and second update data at a
16 plurality of individual units of data storage in each of said first and second storage devices.

1 2. (Canceled): ~~A data duplicating method according to claim 1, wherein said~~
2 ~~difference control information is a bit map that indicates the presence or absence of completion~~
3 ~~of data duplication of said first and second update data at a plurality of individual units of data~~
4 ~~storage in each of said first and second storage devices.~~

1 3. (Currently amended): A data duplicating method that connects a first
2 information processing system comprised of a first host computer and a first storage device and
3 at least one second information processing system comprised of a second host computer and a

4 second storage device through a data transfer path and ~~holds the same data is duplicated in said~~
5 ~~first and second information processing systems by asynchronously copying~~ asynchronously
6 copies first update data generated in said first information processing system to said second
7 information processing system ~~and having, in, said first information processing system[[,]]~~
8 having first difference control information for identifying said first update data not copied to said
9 second information processing system,

10 wherein said second information processing system creates second difference
11 control information for identifying second update data generated in said second information
12 processing system after taking over information and data processing performed by said first
13 information processing system when said first information processing system stops operating,
14 and after resumption of operation of said first information processing system, data in a range
15 specified by said first and second difference control information is selectively copied to said first
16 information processing system,

17 wherein said first and second difference control information are a bit map that
18 indicates the presence or absence of completion of data duplication of said first and second
19 update data at a plurality of individual units of data storage in each of said first and second
20 storage devices.

1 4. (Canceled): ~~A data duplicating method according to claim 3, wherein said~~
2 ~~first and second difference control information are a bit map that indicates the presence or~~
3 ~~absence of completion of data duplication of said first and second update data at a plurality of~~
4 ~~individual units of data storage in each of said first and second storage devices.~~

1 5. (Currently amended): A data duplicating method that connects a first
2 information processing system comprised of a first host computer and a first storage device and
3 at least one second information processing system comprised of a second host computer and a
4 second storage device through a data transfer path and ~~holds the same data is duplicated in said~~
5 ~~first and second information processing systems by asynchronously copying~~ asynchronously
6 copies first update data generated in said first information processing system to said second
7 information processing system, ~~and having, in said first information processing system[[,]]~~

8 having first difference control information for identifying said first update data not copied to said
9 second information processing system,

10 wherein said second information processing system produces second difference
11 control information for identifying second update data generated in said second information
12 processing system after taking over information and data processing performed by said first
13 information processing system when said first information processing system stops operating,
14 and after resumption of operation of said first information processing system, said second update
15 data is selectively copied to said first information processing system on the basis of said second
16 difference control information,

17 wherein said first and second difference control information are a bit map that
18 indicates the presence or absence of completion of data duplication of said first and second
19 update data at a plurality of individual units of data storage in each of said first and second
20 storage device.

1 6. (Canceled): ~~A data duplicating method according to claim 5, wherein said~~
2 ~~first and second difference control information are a bit map that indicates the presence or~~
3 ~~absence of completion of data duplication of said first and second update data at a plurality of~~
4 ~~individual units of data storage in each of said first and second storage device.~~

1 7. (Currently amended): A data duplicating method that connects a first
2 information processing system comprised of a first host computer and a first storage device and
3 at least one second information processing system comprised of a second host computer and a
4 second storage device through a data transfer path and ~~constantly holds the same data is~~
5 ~~duplicated in said first and second information processing systems by synchronously copying~~
6 synchronously copies first update data generated in said first information processing system to
7 said second information processing system,

8 wherein said second information processing system generates second difference
9 control information for identifying second update data generated in said second information
10 processing system subsequent to taking over information and data processing performed by said
11 first information processing system when said first information processing system stops

operating, and after resumption of operation of said first information processing system, said second update data is selectively copied to said first information processing system on the basis of said second difference control information,

wherein said second difference control information is a bit map that indicates the presence or absence of completion of data duplication at a plurality of individual units of data storage in each of said first and second storage devices.

8. ~~(Canceled): A data duplicating method according to claim 7, wherein said second difference control information is a bit map that indicates the presence or absence of completion of data duplication at a plurality of individual units of data storage in each of said first and second storage devices.~~

9. (Currently amended): A data duplicating system comprising a first information processing system comprised of a first host computer and a first storage device, at least one second information processing system comprised of a second host computer and a second storage device and a data transfer path through which data transfer between said first and second information processing systems is carried out, whereby said data duplicating system ~~holds the same data is duplicated in said first and second information processing systems by~~ copying copies first update data generated in said first information processing system to said second information processing system through said data transfer path,

wherein said second information processing system creates difference control information for identifying second update data generated in said second information processing system subsequent to taking over information and data processing performed by said first information processing system when said first information processing system is disabled to operate, and the function to selectively copy said second update data of said second information processing system to said first information processing system on the basis of said difference control information when said first information processing system is enabled to operate,

wherein said difference control information is a bit map that indicates the presence or absence of completion of duplication of said first and second update data at a plurality of units of data storage in each of said first and second storage devices.

1 10. (Currently amended): ~~A data duplicating system according to claim 9,~~
2 ~~wherein said difference control information is a bit map that indicates the presence or absence of~~
3 ~~completion of duplication of said first and second update data at a plurality of units of data~~
4 ~~storage in each of said first and second storage devices.~~

1 11. (Currently amended): A data duplicating system comprising a first
2 information processing system comprised of a first host computer and a first storage device, at
3 least one second information processing system comprised of a second host computer and a
4 second storage device and a data transfer path through which data transfer between said first and
5 second information processing systems is carried out, whereby said data duplicating system
6 ~~holds the same data is duplicated in said first and second information processing systems by~~
7 ~~asynchronously copying~~ asynchronously copies first update data generated in said first
8 information processing system to said second information processing system through said data
9 transfer path,

10 wherein said first information processing system produces first difference control
11 information for identifying said first update data not copied to said second information
12 processing system; and

13 said second information processing system produces second difference control
14 information for identifying second update data generated in said second information processing
15 system subsequent to taking over information and data processing performed by said first
16 information processing system when said first information processing system is disabled to
17 operate, and the function to selectively copy data in a range specified by said first and second
18 difference control information to said first information processing system when said first
19 information processing system is enabled to operate,

20 wherein said first and second difference control information are a bit map that
21 indicates the presence or absence of completion of data duplication of said first and second
22 update data at a plurality of units of data storage in each of said first and second storage devices.

1 12. ~~(Canceled): A data duplicating system according to claim 11, wherein~~
2 ~~said first and second difference control information are a bit map that indicates the presence or~~
3 ~~absence of completion of data duplication of said first and second update data at a plurality of~~
4 ~~units of data storage in each of said first and second storage devices.~~

1 13. (Currently amended): A data duplicating system comprising a first
2 information processing system comprised of a first host computer and a first storage device, at
3 least one second information processing system comprised of a second host computer and a
4 second storage device and a data transfer path through which data transfer between said first and
5 second information processing systems is carried out, whereby said data duplicating system
6 ~~holds the same data is duplicated in said first and second information processing systems by~~
7 ~~asynchronously copying~~ asynchronously copies first update data generated in said first
8 information processing system to said second information processing system through said data
9 transfer path,

10 wherein said first information processing system generates first difference control
11 information for identifying said first update data not copied to said second information
12 processing system; and

13 said second information processing system generates second difference control
14 information for identifying second update data generated in said second information processing
15 system subsequent to taking over information and data processing performed by said first
16 information processing system when said first information processing system is disabled to
17 operate, and the function to selectively copy said second update data of said second information
18 processing system to said first information processing system on the basis of said second
19 difference control information when said first information processing system is enabled to
20 operate,

21 wherein said first and second difference control information are a bit map that
22 indicates the presence or absence of completion of data duplication of said first and second
23 update data at a plurality of units of data storage in each of said first and second storage devices.

1 14. (Canceled): ~~A data duplicating system according to claim 13, wherein~~
2 ~~said first and second difference control information are a bit map that indicates the presence or~~
3 ~~absence of completion of data duplication of said first and second update data at a plurality of~~
4 ~~units of data storage in each of said first and second storage devices.~~

1 15. (Currently amended): A data duplicating system comprising a first
2 information processing system comprised of a first host computer and a first storage device, at
3 least one second information processing system comprised of a second host computer and a
4 second storage device and a data transfer path through which data transfer between said first and
5 second information processing systems is carried out, whereby said data duplicating system
6 ~~holds the same data is duplicated in said first and second information processing systems by~~
7 ~~synchronously copyingsynchronously copies~~ first update data generated in said first information
8 processing system to said second information processing system through said data transfer path,
9 wherein said second information processing system generates difference control
10 information for identifying second update data generated in said second information processing
11 system subsequent to taking over information and data processing performed by said first
12 information processing system when said first information processing system is disabled to
13 operate, and the function to selectively copy data in a range specified by said difference control
14 information to said first information processing system when said first information system is
15 enabled to operate,

16 wherein said second difference control information is a bit map that indicates the
17 presence or absence of completion of data duplication of said first and second update data at a
18 plurality of units of data storage in each of said first and second storage devices.

1 16. (Canceled): ~~A data duplicating system according to claim 15, wherein~~
2 ~~said second difference control information is a bit map that indicates the presence or absence of~~
3 ~~completion of data duplication of said first and second update data at a plurality of units of data~~
4 ~~storage in each of said first and second storage devices.~~